South African Journal of Business Management
ISSN: (Online) 2078-5976, (Print) 2078-5585

Even when it feels difficult to think why I like you, I still do: The role of content, cognitive feelings and thinking systems on the evaluation of close and prominent brands

Authors:
Rogelio Puente-Diaz[1]
Judith Cavazos-Arroyo[2]

Affiliations:
[1]School of Business and Economics, Universidad Anáhuac México, North Campus, Naucalpan de Juárez, Mexico

[2]Interdisciplinary Center for Postgraduate Research, Popular Autonomous University, Puebla, Mexico

Corresponding author:
Rogelio Puente-Diaz,
rogelio.puente@anahuac.mx

Dates:
Received: 14 Nov. 2018
Accepted: 23 Oct. 2019
Published: 30 Jan. 2020

How to cite this article:
Puente-Diaz, R., & Cavazos-Arroyo, J. (2020). Even when it feels difficult to think why I like you, I still do: The role of content, cognitive feelings and thinking systems on the evaluation of close and prominent brands. *South African Journal of Business Management, 51*(1), a1327. https://doi.org/10.4102/sajbm.v51i1.1327

Purpose: The purpose of the present investigation was to examine the influence of recalling many versus few brand attributes on brand evaluations, the mediating role of ease of recall and whether this mediated effect was moderated by thinking styles across two brands of cellphones: iPhone and Galaxy.

Design/methodology/approach: We used a between subjects experimental design to manipulate the amount of information brought to mind of the cellphone brands participants currently own.

Findings/results: Results for iPhone™ showed a positive influence of bringing to mind many brand qualities on brand evaluations. This effect was partially mediated by ease of recall. Results for Galaxy™ not only showed a non-significant direct effect but also a significant indirect effect mediated by ease of recall. Lastly, the mediated effect of bringing to mind more information on brand evaluations of iPhone™ was moderated by experiential and rational thinking.

Practical implications: Results showed the importance of metacognitive experiences for understanding the evaluation of brands.

Originality/value: Our findings have important implications for understanding how consumers evaluate close and prominent brands.

Keywords: ease of recall; content; brands; cognitive feelings; thinking styles.

Introduction

The examination of cognitive feelings and their implications for judgements has increased in recent years (Schwarz, 2004, 2015; Weingarten & Hutchinson, 2018). One of the key assumptions is that individuals use, under the right conditions, cognitive feelings coming from ease of recall to inform such judgements. Similarly, it is well established that some variables, such as the evaluative malleability of the target, influence whether metacognitive feelings are used or whether more weight is given to content brought to mind (Greifeneder, Bless, & Pham, 2010). We would like to add to this line of research by suggesting that brands with closer relationships to consumers (Park, Eisingerich, & Park, 2013) represent a special case of evaluative malleability in which consumers' evaluations are informed by both content brought to mind and cognitive feelings. If this is correct, we would expect the results from our study to deviate from the common finding that bringing fewer pieces of information to mind often leads to better judgements (see Weingarten & Hutchinson, 2018 for a meta-analysis). This does not mean, however, that cognitive feelings are neglected. Instead, we suggest that both sources of information are relevant and used to inform judgements of brands with closer relationships to consumers.

In addition, we propose that the influence of bringing more information to mind and the experienced ease of recall is moderated by individual differences in information processing styles: experiential and rational thinking styles. By examining the special case of two smartphone brands (Mostert, Petzer, & Weideman, 2016), a brand with a closer relationship to consumers, Apple iPhone™, and a relatively weaker brand, Samsung Galaxy™, we hope to make two contributions. Firstly, we would like to shed light on how the evaluation of brands with strong relationships to consumers is influenced by the amount of qualities brought to mind and the ease of recalling these brand qualities. Research on metacognitive experiences usually takes 'an either or' position when examining the influence of cognitive feelings and content on judgements. Specifically, research usually examines as

to when cognitive feelings are more influential than content and when the moderators lead to relying more on content than cognitive feelings. This research often neglects the case when both sources of information are informative. Secondly, we seek to examine how individual differences in thinking styles might moderate the following three processes involved in most experimental protocols of ease of recall: (1) the influence of recalling many or few brand attributes on brand judgements; (2) the influence of recalling many or few brand attributes on ease of recall and (3) the influence of ease of recall on brand judgements. To our knowledge, such detailed moderation analysis of the mediation effect of ease of recall has not been tested before. To reach our research goals, we conducted a preliminary study and two experiments using two smartphone brands, iPhone™ and Galaxy™, to show that in the case of iPhone™ content and cognitive feelings are used to make evaluations. In experiment 2, we partially replicate experiment 1 and, in addition, examine the moderating role of thinking style (Epstein, 2003).

Metacognitive experiences

Research on metacognitive experiences makes the assumption that human judgement is not only influenced by the information brought to mind but also by how this information comes to mind (Schwarz, 2004, 2010). Specifically, when trying to recall evidence about why consumers like a certain brand before making a judgement, consumers' evaluations might be influenced by the amount of brand qualities brought to mind and by the experienced ease of recall. The feelings coming from the experienced ease of recall are labelled as cognitive feelings given that they come from the act of thinking or remembering.

Research on ease of recall and brand evaluations has documented some counterintuitive findings, showing that recalling few brand qualities leads to better brand evaluations than recalling many brand qualities (see Wänke, Bohner, & Jurkowitsch, 1997) because recalling fewer brand qualities is experienced as easier than recalling many brand qualities. The influence of ease of recall on judgements is so robust and reliable that researchers have made a call for more studies examining the boundary conditions of the observed effect (Wänke, 2013), including the examination of target malleability as a potential moderator (Greifeneder et al., 2010). Building on the call for more research on boundary conditions and on the empirical integration of the current literature, we propose that a brand with a closer relationship to consumers, iPhone™, and a brand with a weaker relationship, Galaxy™, represent proxies of less and more malleable targets of judgements in frequently used categories. Hence, we suggest that both, content and ease of recall, would have a significant influence on evaluations of brands with closer relationships to consumers such as iPhone™.

Consumers' relationships with brands

Brands represent one of the most important aspects of modern economic markets, given that consumers and companies value their importance (Tybout & Carpenter, 2010). In addition, brand evaluations represent one of the core aspects of consumer behaviour (Pocheptsova, Labroo, & Dhar, 2010). As a testimony of the importance of brands, different companies publish annual reports with brand valuations. For example, in a recent brand valuation report, Google and Apple have the two top spots with estimated values of over 300 000 million dollars (BrandZ, 2018). iPhone™, the most important product brand of Apple, sold more than 210 000 million[1] smartphones in 2018. To put this number of smartphones sold in perspective, one could say that approximately 3% of the world's population (estimated at around 7.7 billion) bought an iPhone™ in 2018. Hence, brands play a significant role in consumer behaviour.

Several models have been developed to assess consumers' relationships with brands (Aaker, 1991; Keller, 2003). A recent model called the attachment–aversion model (Park et al., 2013) suggests that consumers' relationships with brands can be represented with two dimensions: brand-self distance and brand prominence. Brand-self distance is conceptualised as the perceived distance between the brand and the self (Park et al., 2013). Brand prominence deals with the accessibility of brand-related information. Hence, when examining brands with a strong equity, such as iPhone™, the model predicts high scores on brand-self distance (using a scale with high scores representing low distance) and brand prominence. Empirically, this is the case (Park et al., 2013). Specifically, we posit that consumers should have more accessibility to brand-related information for iPhone™ and shorter brand-self distance than for Galaxy. These differences would lead to evaluations of iPhone™ being informed by content and cognitive feelings, whereas the evaluations of Galaxy™ should be informed mainly by cognitive feelings.

Empirical research

Given that there are more than 150 empirical investigations and more than 200 studies on ease of recall, one way to structure the literature review is to organise it by components of the proposed effects and focus on investigations examining brand evaluations and consumer behaviour (e.g. Lee, 2004; Pocheptsova et al., 2010). Some of the first studies on ease of recall found the counterintuitive positive effect of recalling few pieces of information on brand evaluations because it was easier to recall few versus many brand attributes (Wänke et al., 1997). This effect became the standard finding, which sparked the interest of several consumer scholars. This effect was validated in several investigations examining the role of ease of recall on evaluations of how expensive stores were (Ofir, Raghubir, Brosh, Monroe, & Heiman, 2008) and the attractiveness of tourist spots (Sinha & Naykankuppam, 2013), among others. Hence, consumer behaviour scholars quickly turned their attention to examining potential moderators.

For example, one investigation found a reversed effect (recalling many pieces of information leading to better evaluations) but

1.See Statista: https://www.statista.com/statistics/263401/global-apple-iphone-sales-since-3rd-quarter-2007/.

only when consumers expected difficulty or were under no cognitive load (Menon & Raghubir, 2003). Similarly, another investigation found (in study 2) the standard ease of recall effect but only for ordinary restaurants. For upscale restaurants, recalling many pieces of information led to higher willingness to pay than recalling few pieces of information (Pocheptsova et al., 2010). In another investigation, results showed that under high accuracy motivation, a less familiar brand (Hyundai) was evaluated more positively after recalling 10 versus one reasons to drive a car. Conversely, a more familiar brand (BMW) was evaluated more positively after recalling one versus 10 reasons (Park & Bae, 2014). In another investigation, researchers examined the use of metacognitive feelings as a function of abstract versus concrete thinking. Under conditions of concrete thinking, results showed the standard ease of recall effect (Tsai & Thomas, 2011). However, under abstract thinking, participants who brought more information to mind donated more money than participants who brought less information to mind.

From the literature on ease of recall and brand evaluations, we can make several conclusions. Firstly, the standard ease of recall effect has been found across different investigations and categories of products. Secondly, the standard effect might be reversed as a function of different moderators, which might be classified as characteristics intrinsic to the person, level of knowledge or accuracy of motivation (Ofir et al., 2008; Park & Bae, 2014), or as characteristics related to the target of judgement, ordinary versus upscale restaurants (Pocheptsova et al., 2010) or brand familiarity. Thirdly, in most of these investigations, ease of recall was not used in the statistical analysis. This omission is troublesome because subjective ease is a stronger predictor of evaluations than objective ease (Foster, Leder, & Ansorge, 2013) and because a recent meta-analysis identified ease of recall as an important mediator of the influence of amount of information recalled on evaluations (Weingarten & Hutchinson, 2018). Fourthly, for the most part, these investigations have not used brands with close relationships to consumers, which represents an interesting omission given their role in current markets and recent findings on how consumers develop relationships with brands they like (Reimann, Castaño, Zaichkowsky, & Bechara, 2012). Hence, we try to address some of these limitations by conducting our experiments with brands such as iPhone™ and Galaxy™, including ease of recall in the analysis, and testing the moderating role of thinking style. We propose the following hypotheses:

H1: Bringing to mind many brand attributes would lead to better evaluations of iPhone™ than bringing to mind few brand attributes. Yet, this effect would be partially mediated by ease of recall (study 1 and 2).

H2: Bringing to mind many or few brand attributes would not influence brand evaluations of Galaxy™ directly but indirectly, through its influence on ease of recall (standard ease of recall mediation effect; study 1).

H3: The partial mediation effect suggested in hypotheses 1 and 2 would be moderated by experiential thinking style. Specifically, the use of feelings to make brand evaluations would be stronger at high levels of experiential thinking style (study 2).

H4: The partial mediation effect suggested in hypotheses 1 and 2 would be moderated by rational thinking style. Specifically, the use of content to make brand evaluations would be stronger at high levels of rational thinking style (study 2).

Overview of studies

To accomplish the multiple purposes of our investigation, we first conducted a preliminary study (study 1a) to show that iPhone™ has higher scores on brand-self distance and prominence than Galaxy™. This preliminary study is needed to get an unbiased (not influenced by the experimental manipulations) measurement of brand-self distance and prominence. Including assessments of brand-self distance and prominence in the main experiments would not be feasible, given that the act of recalling few or many pieces of information is likely to influence subsequent brand evaluations. Study 1b represents the first test of the influence of ease of recall on brand evaluations. Study 2 helps validate the findings from study 1 and tests the role of a moderator, thinking style, known to influence the use of feelings and content when making evaluations. In studies 1b and 2, separate analyses were conducted for iPhone™ and Galaxy™ by relying on the assumption that by asking participants to answer questions about their current brand, we should have enough participants evaluating each brand.

Study 1a: Method

To measure consumers' relationships with brands, we asked four questions to 119 college students (88 females, mean age = 25.75 years, SD = 5.44) for each brand taken from the model developed by Park et al. (2013) to assess brand-self distance and brand prominence on a scale of 1–11. Specifically, the four questions assessed to what extent consumers feel close to or far away from iPhone™/Galaxy™, connected or disconnected with iPhone™/Galaxy™ (brand-self distance), thoughts and feelings about iPhone™/Galaxy™ come automatically, and thoughts and feelings about iPhone™/Galaxy™ come naturally, without control (brand prominence).

Results

To establish the superiority of iPhone™ over Samsung Galaxy™ on the brand-self distance and brand prominence dimensions, we conducted two repeated measures analysis of variance (ANOVA). Results for the brand-self distance showed the expected differences between iPhone™ (M = 7.16, SD = 3.52) and Galaxy™ (M = 4.92, SD = 3.26), $F(1, 118) = 18.26$, $p < 0.001$, $\eta^2p = 0.13$. Similarly, the results for the brand prominence dimension showed the predicted differences between iPhone™ (M = 6.42, SD = 3.37) and Galaxy™ (M = 4.42, SD = 3.11), $F(1, 118) = 21.16$, $p < 0.001$, $\eta^2p = 0.15$.[2] Hence, we can conclude that iPhone™ feels closer to the self and has higher prominence than Galaxy™, suggesting that iPhone™ represents a brand with a stronger relationship with consumers with implications for our next two experiments.

2.Results were more striking when we conducted the analysis with iPhone users. Results for the brand-self distance showed the expected differences between iPhone™ (M = 9.80, SD = 1.27) and Galaxy™ (M = 3.37, SD = 2.51), $F(1, 62) = 274.32$, $p < 0.001$. Similarly, the results for the brand prominence dimension showed the predicted differences between iPhone™ (M = 8.51, SD = 2.04) and Galaxy™ (M = 3.52, SD = 2.94), $F(1, 62) = 150.21$, $p < 0.001$.

Study 1b: Method

Participants

Participants were 525 (67% females and 33% males; ages 18–61, M = 21.63 years and SD = 4.72) college business students from Mexico. Questionnaires were administered individually. Students' participation lasted between 10 and 15 min.

Procedure and measures

We had two experimental conditions: recalling and writing down two versus recalling and writing down six qualities of the cellphone brand they currently own. Participants were randomly assigned to one of the two conditions: recalling two versus six. Hence, we used a between-subjects design. This is a widely used, effective experimental procedure to elicit different levels of ease of recall by manipulating the amount of information requested (see Weingarten & Hutchinson, 2018 for a recent meta-analysis). After the experimental manipulation, participants answered three questions about the overall quality of the brand, the efficiency of the operating system and quality of the product design on a scale of 0 (inferior) to 10 (superior; α = 0.84). Lastly, participants answered one question about ease of recalling brand qualities on a scale of 0 (not easy at all) to 10 (very easy).

Ethical consideration

This article followed all ethical standards for a research without direct contact with human or animal subjects.

Results

Analytical strategy

We conducted different analyses to test our hypotheses using a multiple regression approach (Cohen & Cohen, 1983; Hayes, 2018). In both studies, we first established the influence of the experimental manipulation, recalling two versus six brand qualities, on brand evaluations of iPhone™ (we coded as 0 the condition of recalling two brand attributes and as 1 the condition of recalling six). After this first analysis, we tested the mediation effect of ease of recall. The same analyses were conducted for Galaxy™. We then examined in study 2 the possibility of the different types of moderation, the moderation of the overall experimental effect and the moderation of the mediation model, of rational and experiential thinking style.

Overall effect and mediation model for iPhone™

Two hundred and forty-two participants reported having an iPhone™; hence, the analysis was conducted with these participants. We first regressed brand evaluations on the experimental condition. Results showed a significant influence of the experimental condition, b = 0.26, p = 0.024. We then regressed ease of recall on the experimental condition. Results showed a significant influence of the experimental condition, b = -0.89, p = 0.004. We then estimated the relationship between ease of recall and brand evaluations. Results showed a significant influence, b = 0.17, p < 0.001. Lastly, we regressed brand evaluations on the experimental condition and ease of recall. Results showed that both variables, experimental condition and ease of recall, had a significant relationship with brand evaluations, b = 0.43, p < 0.001; b = 0.19, p < 0.001, respectively; R^2 = 0.28, F = 45.09, p < 0.001. To test for the indirect effect of the experimental condition, we used a Monte Carlo method to generate confidence intervals. Results indicated that the indirect effect was significant at the 0.05 level because the confidence interval did not contain zero, CI = -0.29 to -0.05 (Selig & Preacher, 2008). Hence, our results showed that the experimental condition had an indirect as well as direct effect on brand evaluations, suggesting a partial mediation of ease of recall and a direct positive influence of recalling many versus fewer brand attributes on brand evaluations.

Overall effect and mediation model for Galaxy™

One hundred and thirteen participants reported having a Galaxy™; hence, the analysis was conducted with these participants. We followed the same analytical strategy for Samsung Galaxy™. Results showed that the experimental condition was not significant, b = 0.02, p = 0.96. The influence of the experimental condition on ease of recall was significant, b = -1.50, p < 0.001. The relationship between ease of recall and brand evaluations was significant, b = 0.20, p = 0.002. Lastly, we regressed brand evaluations on the experimental condition and ease of recall. Results showed a positive influence of ease of recall, b = 0.23, p = 0.001, and a non-significant influence of the experimental condition, b = 0.35, p = 0.25; R^2 = 0.09, F = 5.59, p = 0.005. The confidence interval for the indirect effect did not contain zero, -0.66 to -0.11, lending evidence to a significant indirect effect of recalling two versus six brand qualities on brand evaluations.

Brief discussion

Contrary to previous empirical findings (see Wänke et al., 1997), results for iPhone™ showed a significant, positive influence of recalling many versus few brand attributes on brand evaluations. However, the influence of the experimental manipulation was partially mediated by ease of recall, supporting hypothesis 1. What these results showed is that both content and ease of recall contributed to brand evaluations. Results for Galaxy™ showed the more standard ease of recall effect, where content did not play a significant, direct role on brand evaluations, supporting hypothesis 2. Given that our results were not consistent with most of the previous empirical findings, we felt the need to conduct a replication. In addition, we also examined some boundary conditions in the form of thinking styles, experiential and rational thinking (Epstein, 2003).

Study 2: Method

Participants

Participants were 550 (67% females and 33% males; ages 18–61, M = 23.5 years and SD = 5.68) college business students from Mexico. These individuals did not participate in study 1a or 1b. Questionnaires were administered individually. Students' participation lasted between 10 and 15 min.

Procedure and measures

As in study 1, participants were randomly assigned to one of two experimental conditions: recalling and writing down two versus six qualities of their current cellphone brand. After the experimental manipulation, participants answered the same three questions about the overall quality of the brand, the efficiency of the operating system and the quality of the product design on a scale of 0 (inferior) to 10 (superior; $\alpha = 0.84$). Participants answered the same question about ease of recalling brand qualities on a scale of 0 (not easy at all) to 10 (very easy). Lastly, participants completed an abbreviated 10-item form of the Rational-Experiential Inventory (Epstein, Pacini, Denes-Raj, & Heier, 1996) on a scale of 1 (completely false) to 5 (completely true) to obtain an experiential score ($\alpha = 0.72$) and a rational score ($\alpha = 0.71$).

Results

Overall effect and mediation model for iPhone™

Three hundred and three participants reported having an iPhone™; hence, the analysis was conducted with these participants. We followed the same analytical strategy as study 1 (see Table 1 for descriptive statistics of study 1b and 2). We first regressed brand evaluations on the experimental condition. Results showed a significant influence of the experimental condition, $b = 0.21$, $p = 0.04$. We then regressed ease of recall on the experimental condition. Results showed a significant influence of the experimental condition, $b = -1.0$, $p < 0.001$. We then estimated the relationship between ease of recall and brand evaluations. Results showed a significant influence, $b = 0.17$, $p < 0.001$. Lastly, we regressed brand evaluations on the experimental condition and ease of recall. Results showed that both variables, experimental condition and ease of recall, had a significant relationship with brand evaluations, $b = 0.40$, $p < 0.001$; $b = 0.19$, $p < 0.001$, respectively; $R^2 = 0.22$, $F = 42.07$, $p < 0.001$. To test for the indirect effect of the experimental condition, we used a Monte Carlo method to generate confidence intervals. Results indicated that the indirect effect was significant at the 0.05 level because the confidence interval did not contain zero, CI = -0.36 to -0.05 (Selig & Preacher, 2008). Hence, consistent with study 1, our results showed that the experimental condition had an indirect and direct effect on brand evaluations.

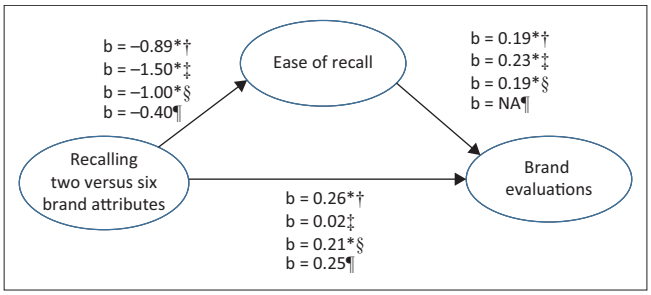
Overall effect and mediation model for Galaxy™

Eighty-five participants reported having a Galaxy™; hence, the analysis was conducted with these participants. We followed the same analytical strategy for Samsung Galaxy™ consumers. Results showed that the experimental condition was not significant, $b = 0.25$, $p = 0.39$. Similarly, the influence of the experimental condition on ease of recall was not significant, $b = -0.40$, $p < 0.37$ (see Figure 1 for a summary of models from study 1 and 2). Hence, bringing to mind two versus six brand qualities of Samsung Galaxy™ did not lead to better evaluations or to higher levels of ease of recall, failing to support hypothesis 2 and leaving us without the opportunity to test hypotheses 3 and 4 for Galaxy™.

The moderating influence of rational and experiential thinking

To test for moderated mediation, we followed the guidelines set by Muller, Judd and Yzerbyt (2005), and estimated three regression equations for iPhone™: (1) the moderation of the overall treatment effect; (2) the moderation of the experimental condition on the mediator; and (3) the moderation of the mediator effect on brand evaluations and the residual effect of the experimental condition on brand evaluations while controlling for the mediator. We conducted two separate analysis, one for rational and one of experiential mode of thinking. Experiential and rational thinking styles were treated as continuous variables.

Results from the first equation showed a significant interaction between the experimental condition and the moderator, $b = 0.16$, $p = 0.04$, suggesting that bringing to mind more brand attributes led to higher brand evaluations specially at higher levels of rational thinking. Results from the second equation showed a significant influence of the experimental condition, $b = -0.51$, $p < 0.001$, on ease of recall and a significant interaction between the experimental condition and rational thinking style on ease of recall, $b = -0.58$, $p = 0.001$. What these results suggest is that it was easier to bring to mind two versus six brand attributes especially at lower levels of rational thinking.



*, significant at the 0.05 level.

NA, Non-applicable (given that the mediator was not influenced by the experimental condition).

†, Study 1 iPhone, CI indirect effect = -0.29, -0.5; ‡, Study 1 Galaxy, CI indirect effect = -0.66, -0.11; §, Study 2 iPhone, CI indirect effect = -0.36, -0.05; ¶, Study 2 Galaxy, CI indirect effect is not applicable.

FIGURE 1: Summary of results from mediation model of studies 1 and 2.

TABLE 1: Descriptive statistics of study 1b and 2.

Outcome variables	Study 1b				Study 2			
	Recall 2		Recall 6		Recall 2		Recall 6	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Brand evaluations iPhone	8.85	0.94	9.11	0.82	9.03	0.96	9.23	0.8
Brand evaluations Galaxy	8.28	1.43	8.30	1.76	8.52	1.54	8.78	1.14
Ease of recall iPhone	8.50	2.04	7.60	2.66	8.30	2.07	7.30	2.23
Ease of recall Galaxy	8.40	1.63	6.90	2.64	8.10	2.13	7.70	1.95

Lastly, results from the third equation showed a significant influence of ease of recall, $b = 0.17$, $p < 0.001$, and the interaction between ease of recall and rational thinking, $b = -0.08$, $p = 0.01$. From these results, we can conclude that the influence of bringing to mind two versus six brand attributes on brand evaluations, through its influence of ease of recall, is moderated by rational thinking. By observing a mediation model, we can see that there are three paths that can be moderated: the path that goes from the experimental manipulation to brand evaluations; the path that goes from the experimental manipulation to ease of recall; and the path that goes from ease of recall to brand evaluations. To aid the interpretation of our results, we divided our rational thinking variables into tertiles and re-examined the influence of bringing to mind two versus six brand attributes on ease of recall and the influence of ease of recall on brand evaluations at different levels of rational thinking.

Results for brand evaluations showed that the influence of the experimental manipulation was only significant at high levels of rational thinking, $F(1, 110) = 8.15$, $p = 0.005$, $M_{two} = 9.17$, $SD_{two} = 0.73$ versus $M_{six} = 9.50$, $SD_{two} = 0.47$, suggesting that it was better to bring more attributes to mind only at high levels of rational thinking.

Results showed that the influence of the experimental manipulation on ease of recall was only significant at low levels of rational thinking, $F(1, 84) = 15.62$, $p < 0.001$, $M_{two} = 8.31$, $SD_{two} = 2.32$ versus $M_{six} = 6.16$, $SD_{two} = 2.69$, suggesting that it was only easier to bring to mind two rather than six attributes when participants had low levels of rational thinking. Similarly, correlational analysis showed that the positive relationship between ease of recall and brand evaluations was significantly stronger at low levels of rational thinking than at high levels: $r_{low} = 0.57$ versus $r_{high} = 0.13$, difference test, $Z = 3.55$, $p < 0.001$.

We used the same analytical strategy for experiential thinking. Results from the first equation showed that the interaction between the experimental condition and experiential thinking was not significant, $b = -0.06$, $p = 0.45$. Results from the second equation showed that the experimental manipulation was significant, $b = -0.49$, $p < 0.001$. Lastly, results from the third equation showed that the influence of ease of recall and the interaction between ease of recall and experiential thinking were significant, $b = 0.19$, $p < 0.001$; $b = 0.09$, $p = 0.01$. What these results showed is that the partial effect of ease of recall on brand evaluations is moderated by experiential thinking. Hence, to increase the interpretability of the results, we divided our experiential thinking variable in tertiles and re-examined the influence of ease of recall on brand evaluations at different levels of experiential thinking.

Results for brand evaluations showed that the influence of the experimental manipulation was not significant at any levels of experiential thinking. Conversely, the influence of the experimental manipulation on ease of recall was significant only at low levels of experiential thinking, $F(1, 90) = 5.68$, $p = 0.02$, $M_{two} = 8.05$, $SD_{two} = 2.10$ versus $M_{six} = 6.92$, $SD_{two} = 2.38$, suggesting it was easier to bring two versus six brand attributes to mind at low levels of experiential thinking. Lastly, correlational analysis showed that the positive relationship between ease of recall and brand evaluations was significantly stronger at high levels of experiential thinking than at low levels: $r_{high} = 0.62$ versus $r_{low} = 0.28$, difference test, $Z = 3.01$, $p < 0.001$.

Brief discussion

Our results provided additional support for the positive influence of bringing to mind many versus few brand attributes on the evaluations of iPhone™. Yet, this direct effect was partially mediated by ease of recall, lending additional support for hypothesis 1. In addition, the mediated partial effect was moderated by experiential thinking style, supporting hypothesis 3. Specifically, for individuals with low levels of experiential thinking only, it was easier to think of two than six brand attributes. In addition, individuals with higher levels of experiential thinking used their feelings more to inform brand evaluations of iPhone™, as shown in the higher correlation between ease of recall and brand evaluations. Results for rational thinking also showed a significant moderation of the mediated effect, supporting hypothesis 4. Specifically, for participants with high levels of rational thinking only, recalling many versus few brand attributes led to better evaluations of iPhone™. The influence of recalling many versus few brand attributes on ease of recall was only significant at low levels of rational thinking. Lastly, cognitive feelings had a stronger relationship with brand evaluations at low levels of rational thinking. The results for Galaxy™ did not support the hypothesised mediation effect. Hence, contrary to study 1b and to hypothesis 2, the influence of bringing to mind many versus few brand attributes was not mediated by ease of recall, and the direct influence was not significant either.

General discussion

In two studies, we found that bringing to mind many brand qualities led to better brand evaluations than bringing to mind fewer brand qualities for a brand with a closer relationship to consumers such as iPhone™. This effect did not hold for Galaxy™. Yet, this direct, significant effect was partially mediated by ease of recall. In addition, this mediated effect was moderated by experiential and rational thinking styles (study 2). We organised our discussion by first discussing the direct influence of recalling many versus fewer pieces of information (amount of content) on judgements, followed by the discussion of the role of ease of recall and its boundary conditions.

Amount of content

Most research on ease of recall has documented that bringing to mind fewer pieces of information often leads to better brand evaluations (Wänke et al., 1997). The assumed mechanism, often untested in empirical investigations but recently tested in a meta-analysis (Weingarten & Hutchinson, 2018), was that recalling few pieces of information was experienced as easier and that these cognitive feelings were

used to inform judgements. The stronger emphasis given to cognitive feelings than content came as a response to traditional models of attitudes, which for the most part neglected the role of feelings (Schwarz, 2004). However, in trying to show that feelings played an important role, researchers neglected cases where both content and feelings can inform judgements and also instances when more information is better. We suggested and found empirical support for the idea that when evaluating brands with closer relationships to consumers, content and cognitive feelings can serve as sources of information. Hence, bringing to mind many versus fewer brand qualities of iPhone™ led to better brand evaluations. These results were not consistent with most of the empirical literature on ease of recall and brand evaluations (Ofir et al., 2008; Wänke et al., 1997), yet they were consistent with some postulates of dual-process models (Thompson, 2009). In addition, the positive influence of bringing to mind more information did not lead to the same results for Galaxy™, lending evidence to the importance of brand relationships with consumers. However, it is worth noting that the influence of the amount of content brought to mind on brand evaluation was not able to tell the complete story. We needed to include ease of recall as well.

The mediating role of ease of recall

One of the major strengths of the theoretical formulations of ease of recall is precisely the proposition that the act of recalling can be perceived as easy or difficult. Even though we might safely assume that it is easier to recall few rather than many brand attributes, there is still enough variability to warrant the measurement and inclusion of ease of recall in the analysis. In addition, some investigations have shown subjective ease to be more important than objective ease (Foster et al., 2013). In our two experiments, we found support for the partial meditation of ease of recall on the relationship between amount of information brought to mind and brand evaluations of iPhone™, which was consistent with a large literature documenting the role of ease of recall (Weingarten & Hutchinson, 2018) but only partial support for Galaxy™. What separates our results from previous findings is the idea that for brands with closer relationships to consumers, bringing to mind more information can lead to better evaluations, especially when this information is brought to mind with ease. Our results showed that the best-case scenario in terms of brand evaluations of iPhone™, by dichotomising perceived ease and combining it with the experimental condition, was bringing six brand attributes to mind with ease (M = 9.46), followed by two with ease (M = 9.19), six with difficulty (M = 8.76) and two with difficulty (M = 8.22). Hence, content and ease of recall informed brand evaluations of iPhone™. However, these overall mediation results for iPhone™ were qualified by experiential and rational thinking styles.

The role of thinking styles

Two thinking styles, experiential versus rational, influence the use of feelings and content when making evaluations (Danziger, Moran, & Rafaely, 2006; Wänke, 2013). Hence, they represented potential candidates for moderating the mediating effect of ease of recall on brand evaluations. Specifically, our results showed that experiential thinking influenced how easy it was to recall two versus six brand attributes. Recalling two brand attributes was only easier than recalling six brand attributes at low levels of experiential thinking. In addition, the influence of cognitive feelings on brand evaluations was stronger at higher levels of experiential thinking. Hence, experiential thinking influenced the emergence of cognitive feelings and the use of cognitive feelings when evaluating iPhone™, which was consistent with some of the postulates of cognitive-experiential self-theory (Epstein, 2003).

Conversely, rational thinking had a different pattern of influence. Specifically, the positive influence of more content information on brand evaluations was only significant at higher levels of rational thinking. The perceived ease of bringing to mind two brand attributes versus six was only significant at low levels of rational thinking. Lastly, the use of cognitive feelings to make brand evaluations was only significant at low levels of rational thinking. What these two sets of results showed is that experiential thinking exerted a significant influence on the generation and use of cognitive feelings, paying more attention to feelings than content. Conversely, rational thinking influenced the use of content, the recall of brand attributes and the use of cognitive feelings, favouring content over cognitive feelings. In general, these results were consistent with the postulates of cognitive-experiential self-theory (Epstein, 2003) and represented an important addition to the literature on metacognitive experiences, shedding additional light on the interplay between content and cognitive feelings.

Conclusion

Limitations and future directions

Our investigation had several limitations. Firstly, we used a sample of convenience in both investigations. Even though college students could represent a relevant target for smartphones and for brands such as iPhone™ and Galaxy™, future research should use a more representative sample of the population. Secondly, even though our investigation tried to assess the role of content and cognitive feelings, the experimental procedure used was not able to truly isolate the role of content from the role of feelings. When participants were asked to bring more or less information to mind, the amount of information brought to mind was accompanied with cognitive feelings. Yet, our investigation tried to make the point that even when bringing the same amount of information to mind, six brand attributes, for example, experienced ease of recall still played an important role. Similarly, even when perceived ease was experienced, the amount of information brought to mind mattered as well. Our third limitation was that even though we predicted an integration of content and cognitive feelings when evaluating iPhone™, our investigation was silent about the antecedents of differences in perceived ease among participants asked to recall the same number of

brand qualities. Differences in perceived ease might be a function of individual differences in the relationship formed with brands. Even for strong and powerful brands, some consumers might develop a stronger relationship than others might. Another limitation of our investigation is that brand relationship development is a complex, multifaceted phenomena. Our investigation only tried to explain how brand evaluations of brands with closer relationships to consumers, on different attributes such as overall quality or product design, are informed by content and cognitive feelings.

In sum, in two investigations, we found support for a direct influence of recalling more information on brand evaluations of iPhone™ and for an indirect effect, mediated by ease of recall, on brand evaluations. Conversely, we did not find support for a direct effect of amount of recall on brand evaluations of Galaxy™. The indirect effect, mediated by ease of recall, was only significant in one of two studies. The mediated effect for iPhone™ was moderated by experiential and rational thinking in ways consistent with cognitive-experiential self-theory (Epstein, 2003). Our results showed that brands with closer relationships with consumers might have unique characteristics that allow consumers to use content and cognitive feelings to inform their brand evaluations.

Acknowledgements

Competing interests

The authors have declared that no competing interest exists.

Authors' contributions

R.P-D. designed the study, collected data, performed the statistical analysis and wrote the article. J.C-A. helped with the design of the study, data collection and the final draft of the article.

Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Data availability statement

Data is available upon request from the first author.

Disclaimer

The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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